



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 13, 2021

VIA ELECTRONIC MAIL

Mike Classen, P.E
General Manager, Nashville Post-Collection
Middle Point Landfill
750 E Jefferson Pike
Murfreesboro, Tennessee 37130
mclassen@republicservices.com

Dear Mr. Classen:

Enclosed is a copy of the final report generated by the U.S. Environmental Protection Agency's Region 4 Air Enforcement Section II for the inspection conducted at the Middle Point Landfill located in Murfreesboro, TN, on July 21, 2021.

Should you have questions regarding this inspection report, contact me at (404) 562-9216, or by email at Lloyd.David@epa.gov

Sincerely,

David Lloyd

David Lloyd
Physical Scientist
Air Enforcement Section II

Enclosure

cc: Bill.McCabe@TN.gov

**United States Environmental Protection Agency (EPA) Region 4
Air Enforcement Branch
Final Inspection Report**

I. GENERAL INFORMATION

Facility Name: Middle Point Landfill

Location (Address): 750 East Jefferson Pike, Murfreesboro, TN

Inspection Date: July 21, 2021

Type of Inspection (Full or Partial Compliance Evaluation):
Partial Compliance Evaluation

ICIS-Air Number 110001864518

EPA Investigator(s)/Inspector(s):

1. David Lloyd, Physical Scientist
2. Richard Helmich, Environmental Engineer
3. Daniel Hoyt, Environmental Engineer

State/Local Investigator(s)/Inspector(s):

1. N/A

Person(s) Contacted at Facility (Name and Title):

1. William McWhorter, Environmental Specialist, Republic Services
2. Kyle Brickler, Project Manager, SCS Field Services

Report Prepared by: David Lloyd

II. FACILITY INFORMATION

A. Facility and Permit Information

| Facility and Permit Information | Comments |
|--|---|
| 1. Type of facility (e.g., chemical plant, refinery, cement manufacturer, etc.). | Municipal Solid Waste landfill |
| 2. Air permit number(s) and type of permit (e.g., Title V, PSD, Synthetic Minor, etc.). | Title V permit #574840 |
| 3. Air permit issuance date. | January 30, 2020 |
| 4. Air permit expiration date. | January 29, 2025 |
| 5. Facility classification (Major, Synthetic Minor/Conditional Major, Minor). | Major Title V source |
| 6. Major source pollutants (if applicable). | |
| 7. Applicable regulations (e.g., State Implementation Plan, MACT Subpart FFFF, NSPS Subpart EEEE, etc.). | NSPS Subpart WWW, NESHAP Subpart AAAA, NESHAP Subpart M |
| 8. Types of air emission points (e.g., tanks, process vents, boilers, etc.). | Landfill surface, flares |
| 9. Types of air pollution control equipment (e.g., baghouse, scrubber, afterburner, etc.). | Landfill gas collection and control system |

B. Process Description (provide narrative or attach description provided by the company or excerpts from the permit)

Middle Point landfill is a municipal solid waste landfill with a landfill gas collection and control system.

III. INSPECTION ACTIVITIES

| Activity | Yes No NA | Comments |
|--|-----------------|--|
| Opening Meeting | | |
| 1. Date and time entered the facility. | Y | July 21, 2021, 3:00 p.m. |
| 2. Credentials presented to facility personnel (include name and title). | Y | EPA inspectors presented credentials to Mr. McWhorter. |
| 3. Conducted an opening meeting to explain the purpose and objectives of the inspection. | Y | EPA inspectors arrived on-site and discussed inspection objectives with facility personnel, which were to collect air data using the GMAP mobile air monitoring vehicle. The inspection team explained that the vehicle is equipped with analyzers for hydrogen sulfide, methane, benzene, toluene, ethylbenzene, xylene, and other VOCs. The GMAP allows for real-time monitoring and mapping of pollutants while the vehicle traverses the facility. |
| 4. Discussed safety issues. | Y | The inspection team discussed what areas of the landfill could be safely accessed with the GMAP vehicle. |
| 5. Discussed which records to be reviewed. | Y | EPA inspectors did not review any records on-site. |
| 6. Discussed the facility walk-through and the areas to be observed in the facility. | Y | The Region 4 inspector explained that the GMAP vehicle would collect air samples from within the facility property boundary from along facility haul roads. |
| 7. Discussed facility policy regarding photographs or video (if applicable). | Y | Inspectors explained that images taken would be shared with the company to review for potential CBI content. |
| 8. Discussed the use of the infrared camera, TVA, PID, and any other equipment. | Y | Inspectors discussed use of the GMAP vehicle as well as the use of an infrared camera. |
| 9. Discussed CBI. | Y | Inspectors discussed that a draft inspection report would be sent to the facility for CBI review. |
| Records Reviewed at the Facility | | |
| 10. The types of records reviewed and the time period reviewed. | N/A | Records were not reviewed at the facility. |

| Activity | Yes No NA | Comments |
|---|-----------------|---|
| Facility Walk-Through Observations | | |
| <p>11. The process equipment observed and the associated operational rate observed (e.g., Furnace 1 production rate was 5 lbs/hr on 1/1/15, at 2:00 p.m. – permit requires max rate at 6 lbs/hr).</p> <p>Provide the date and time the information was recorded by the inspector.</p> <p>Identify the permit limit (if applicable).</p> <p>An attachment may be used for a large amount of information.</p> | Y | <p>Inspectors collected ambient data using the GMAP vehicle from accessible areas of the facility. The inspection team indicated that the data collected would be made available to the facility after CBI review. This data will include the routes traveled & data collected by the GMAP vehicle.</p> <p>Infrared camera video of the two enclosed flares (flare 100 & 120) was recorded (see attached file: MOV.0039.mp4). The camera recorded hydrocarbon plumes downwind of each flare stack.</p> <p>Infrared camera video of the two large storage tanks adjacent to the flares was recorded (see attached file MOV_0040.mp4). A plume of hydrocarbons was visible from a tank vent or possibly a leak, particularly when the camera was in “high definition” mode.</p> <p>At about 4:20 p.m., the GMAP vehicle registered elevated VOC concentrations in the 1.6 ppm range directly adjacent to the active disposal area of the landfill. There were numerous trucks unloading MSW and heavy equipment compacting the MSW at the time.</p> |
| 12. If process equipment or parametric monitoring equipment was not operating, state the reason by facility personnel why the equipment was not operating. | N/A | |

| Activity | Yes No NA | Comments |
|---|-----------------|----------|
| <p>13. The type of air pollution control equipment, the process equipment it is controlling, and the associated parametric monitoring value observed (e.g., baghouse pressure drop, temperature, scrubber flow rate, etc.).</p> <p>(For example - RTO 1 controlling furnace 1, 1,500 degrees F on 1/1/15, at 2:00 pm – permit requires 1,400 degree F or higher).</p> <p>Provide the date and time the information was recorded by the inspector.</p> <p>Identify the permit limit (if applicable).</p> <p>An attachment may be used for a large amount of information.</p> | N/A | |
| <p>14. Continuous emissions monitoring devices and values observed. (e.g., CEMS, COMs, etc.).</p> <p>Provide the date and time the information was recorded by the inspector.</p> <p>Identify the permit limit (if applicable).</p> <p>An attachment may be used for a large amount of information.</p> | N/A | |
| <p>15. If air pollution control equipment was not operating, state the reason by facility personnel why the equipment was not operating.</p> | N/A | |

| Activity | Yes No NA | Comments |
|---|-----------------|--|
| 16. Capture and collection system (enclosures and hoods) observations, if applicable (e.g., the magnitude and duration of emission escaping capture from the hood). | N/A | |
| 17. Ductwork transferring the emissions to the air pollution control device observations, if applicable (e.g., the magnitude and duration of emission escaping from the ductwork, holes or deterioration in ductwork, no deterioration observed, etc.). | N/A | |
| 18. Any existing unpermitted emission points, new unpermitted emission points, or non-permitted construction activities observed. (if yes, describe in the comments field). | N/A | |
| 19. Were any visible emissions observed? (if yes, identify the location and equipment). | N | Note: infrared video was taken as described in item 11 of this report. |
| 20. Was a Method 9 reading performed? (if yes, identify the location and equipment). | N | |
| 21. Was the cause of the visible emissions investigated and the information documented? | N/A | |

| Activity | Yes No NA | Comments |
|---|-----------------|-----------------------------|
| 22. Was a Method 22 performed for visible emissions? (if yes, identify the location and equipment). | N | |
| 23. Identify the cause of the visible emissions as explained by facility personnel, if applicable. | N/A | |
| 24. Was the infrared camera used? If so, attach the video log (which includes the equipment ID, and the date and time the video was recorded) and videos to this report. | Y | See item 11 of this report. |
| <p>25. Was the TVA used? If so, identify the equipment monitored and the results.</p> <p>Provide the date and time the information was recorded by the inspector. Include actual instrument readings for each piece of equipment monitored above the leak definition and/or where the infrared camera identified a release.</p> <p>An attachment may be used for a large amount of information.</p> | N | |
| <p>26. Was the PID used? If so, identify how the PID was used and the results.</p> <p>Provide the date and time the information was recorded by the inspector.</p> <p>An attachment may be used for a large amount of information.</p> | N | |
| | | |

| Activity | Yes No NA | Comments |
|---|-----------------|---|
| Closing Meeting | | |
| 27. Conducted a closing meeting. | Y | The inspection team discussed preliminary observations of GMAP data and subsequent procedures to conduct quality assurance and control review of the data, and that the data would be made available after such review. |
| 28. Summarize any additional information needed, if applicable? | N/A | |
| 29. Accept a declaration of CBI, if applicable? | N/A | |
| 30. Discussed observations. | Y | See item 27 |
| 31. Discussed next steps, if applicable? | Y | Inspectors discussed providing a draft inspection report and the GMAP data to the facility. |
| 32. Date and time inspection concluded. | | Approximately 4:45 p.m., July 21, 2021 |
| | | |
| Miscellaneous | | |
| 34. Include any additional observations, if applicable. | N/A | |
| | | |

EPA Investigator/Inspector Signature:

EPA Supervisor Signature & Title

Date Report Finalized:

David Lloyd
 JASON DRESSLER
 Digitally signed by JASON DRESSLER
 Date: 2021.12.13 14:33:53 -05'00'

_Chief, North Air Enforcement Section__

_December 13, 2021_____